



TETRA Customer Programming Software (CPS)
for d700/d1700/MTH300/MTH300S/MTP200/MTP300/MTM300
Start-up User Guide

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Preview

This *User's Guide* contains the information necessary to install and get a basic understanding of how to use TETRA Customer Programming Software (CPS). The TETRA CPS is a PC-based software programme from Motorola that is used to program features into TETRA phones to customise their operation.

Note: This guide assumes that you are familiar with basic Windows operations. If this is not the case, be sure to read the documentation that came with your version of Windows before you proceed.

WHO SHOULD USE THIS GUIDE

This *Guide* is intended for anyone who will use the CPS to program TETRA phones.

WHAT TO LOOK FOR IN THIS GUIDE

This guide is organised as follows:

Section 1 describes the CPS installation process.

Section 2 explains the hardware setup required to program TETRA phones.

Section 3 provides an overview of the CPS. It shows you how to obtain on-line help and navigate through the user interface.

WHAT TO LOOK FOR IN THIS GUIDE (*continued*)

Section 4 is a tutorial that provides step-by-step instructions on how to perform selected tasks using the CPS.

The *Appendixes* contain:

- CPS menu map
- Keyboard shortcuts
- Troubleshooting information
- Details on contacting Motorola for technical support or to order programming hardware.




WHAT TO LOOK FOR ON-LINE

This guide is designed to supplement the on-line help installed with the CPS. Be sure to refer to the on-line help for context-sensitive information:

- Phone codeplug blocks
- CPS menus and menu functions
- CPS fields

For information on how to access the on-line help, turn to page 20.

CONVENTIONS USED IN THIS GUIDE:

Convention	Description
<i>italics</i>	Used for emphasis and for new terms.
bold	Used to indicate keyboard keys.
File/Open	Used to designate the location and name of a CPS menu function. For example, File/Open refers to the Open function in the File menu.
 TIP:	Denotes tips and hints on using the CPS.
	Indicates that the task procedure continues on the following page.
Note:	Indicates an operational procedure, practice, or condition to which you should pay special attention.
 Caution	Alerts you of conditions which can result in loss or corruption of data, or damage to application files.
TETRA Phone	Designates: d700, d1700, MTH300, MTH300S, Dimetra MTP200, Dimetra MTP300 handsets, or MTM300 mobile radio.

Section 1: Installing the Software

Note: The CPS allows you to keep multiple codeplug windows open simultaneously. The number of codeplug windows that can remain open at any given time is determined by the amount of memory available to the CPS.

Note: To access the carrier and depot programming levels, use a hardware key called dongle. Ask your local customer service representative for more information. Plug the dongle into the PC's parallel printer port. When using a programming kit cable with parallel connection, connect the cable to the PC through the dongle.

SYSTEM REQUIREMENTS

The TETRA CPS requires an IBM® PC or compatible computer with the following minimum configuration:

Processor	Pentium 133 or later
Memory (RAM)	16 MB
Free hard disk space for installation	50 MB
Drive	CD-ROM
Operating system	Microsoft Windows 95/98

The TETRA CPS has three programming levels: organiser, carrier, and depot. The screens shown as examples in this guide belong to the Carrier level.



Caution

Do not delete or move any files installed with the CPS. They are required to run the CPS.

INSTALLING THE CPS

Follow the steps below to install the CPS on your hard drive:

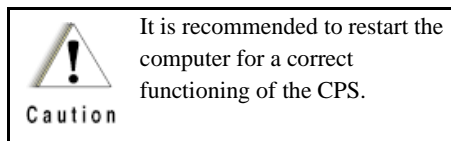
- 1 Quit all Windows applications to ensure a successful installation.
- 2 Insert the CD-ROM into its drive.
- 3 The Autorun screen appears. Select Install CPS from the screen.

Note: If the Autorun screen is deactivated, start the Explorer. Navigate to the CD folder called "Autorun". Double click on autorun.exe.

The setup programme will run InstallShield wizard to guide you through the installation process.

If a version of the CPS already exists on your computer, you will be prompted if you want to remove that version. We recommend that you remove the existing version. Any files that you may have saved to the existing CPS directory will not be deleted during the remove process.

- 4 When the Welcome screen appears, read the instructions and click Next.
- 5 In the Choose Destination Location screen, click Next to install the CPS in the default location. *To select a different installation directory, click the Browse button.*

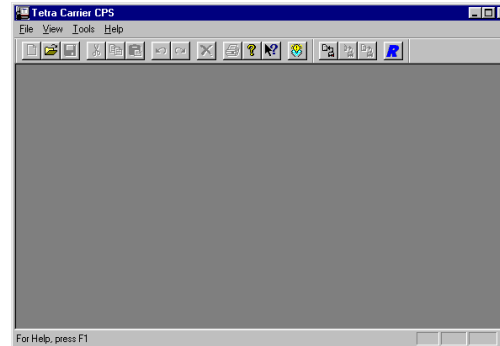


- 6 Select the desired Programme Folder name for describing the CPS in the Windows Start menu. Click Next to begin the installation.
- 7 When the setup is complete, you will be prompted if you want to create a desktop shortcut to the CPS. Click Yes to create the shortcut. As an option, you can choose to read the Readme file. Then click Finish to exit setup.

VERIFYING THE INSTALLATION

Once the CPS is installed, verify that the installation was successful.

- 1 Launch the CPS from the Windows Start menu, or double-click the desktop shortcut.
- 2 Select **Help/About CPS...** Verify CPS version number and programming level. Click Details... for further information on: database version, supported model, current codeplug version, current software version, model number, and model type. Click OK, and OK again to return to the screen shown below.



If the CPS does not start up as described above, see the “Troubleshooting” section on page 40.

Section 2: Setting Up the Hardware

Note: For complete information on the d700 programming kits, contact your local customer service representative.



Caution

Make sure that you are using a fully charged battery in the handset prior to running the CPS. This will ensure that the unit does not power down during programming.



Caution

During programming of the d700/MTH300 handsets, ESD (Electrostatic Discharge) might cause a “Reset” in the programming software. When the “Tetra Carrier CPS!” message is displayed on the PC screen, you must start the programming process from the beginning.

Before you proceed, make sure you have all the necessary hardware from the list from page 44 on.

HARDWARE SETUP: PROGRAMMING d700/MTH300 WITH PROGRAMMING KITS FLN2686 (UK plug)/FLN2687 (Euro plug)

Use the programming kit with the following software items:

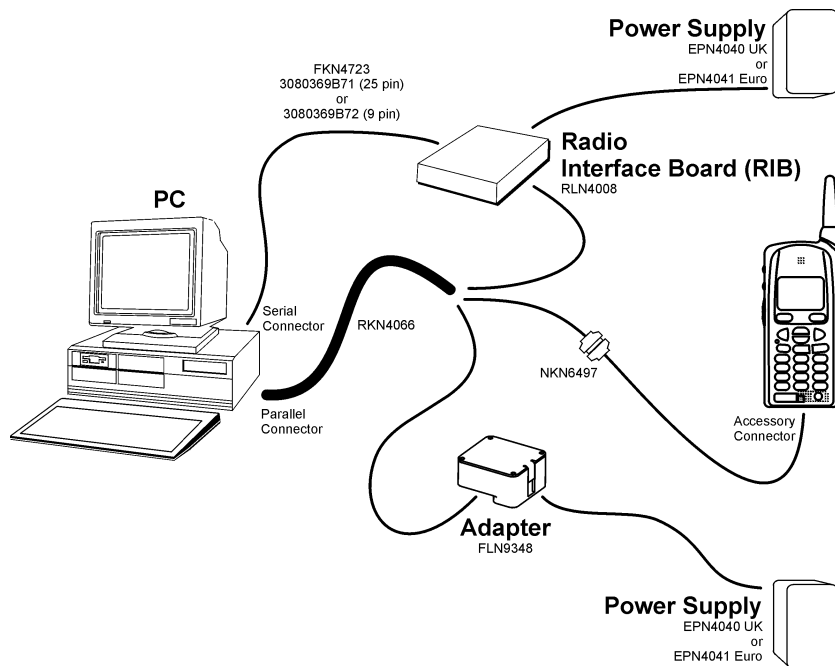
Description	Release 1.1	Release 2.0	Release 3.1
d700 CPS	FVN4815	FVN4960	---
MTH300 CPS	---	---	FVN4862
MTH300S CPS	---	FVN4892	----

The programming kit interfaces between the handset and an IBM PC (or compatible computer) running the Terminal Programming Application (TPA) and/or CPS. To connect the programming kit, proceed as follows:

- 1 Make sure the handset is turned off.
- 2 Connect the programming kit as illustrated on page 12.
- 3 Follow the instructions on your PC. ➡

Note: Programming kits FLN2686/FLN2687 consist of all required cables per table on page 44.

PROGRAMMING d700/MTH300 WITH PROGRAMMING KITS FLN2686 (UK plug)/FLN2687 (Euro plug)—continued



HARDWARE SETUP: PROGRAMMING d700/MTH300/MTH300S WITH PROGRAMMING KITS FLN2908 (UK plug)/FLN2909 (Euro plug)

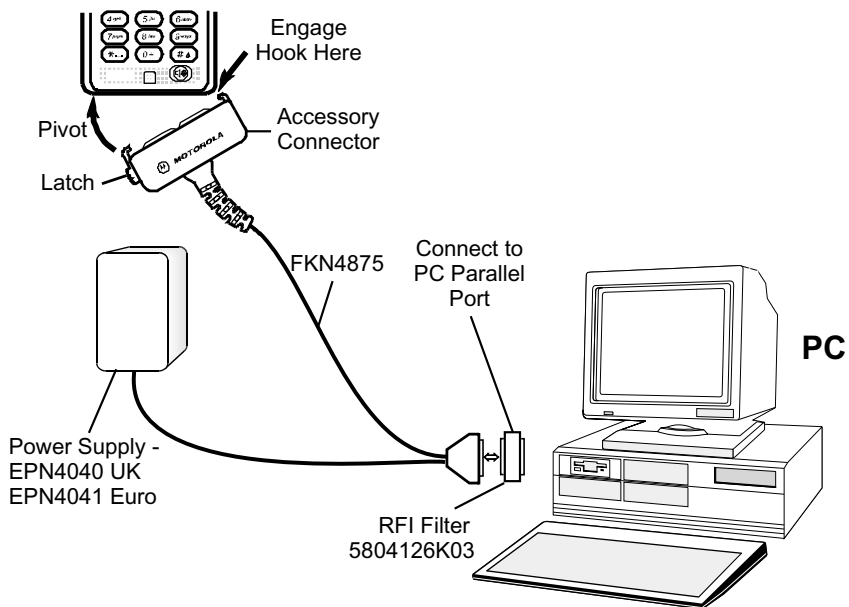
Use the programming kit with the following software items:

Description	Release 1.1	Release 2.0	Release 3.1
d700 CPS	FVN4815	FVN4960	---
MTH300 CPS	---	---	FVN4862
MTH300S CPS	---	FVN4892	----

- 1** Make sure the handset is turned off.
- 2** Connect the programming kit as illustrated on page 14.
- 3** Follow the instructions on your PC. ➡

Note: Programming kits FLN2908/FLN2909 consist of all required cables per table on page 45.

PROGRAMMING d700/MTH300/MTH300S WITH PROGRAMMING KITS FLN2908 (UK plug)/FLN2909 (Euro plug)—*continued*




HARDWARE SETUP: PROGRAMMING d1700 WITH DATA CABLE FKN4897

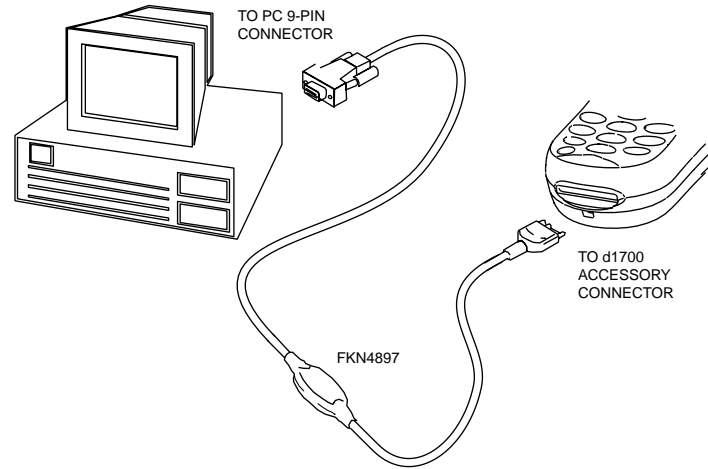
Use the cable with the following software item:

Description	Release 1
d1700 CPS	FVN4824

The data cable interfaces between the handset and an IBM PC (or compatible computer) running the TETRA CPS. To perform the programming, proceed as follows:

- 1** Connect the data cable as illustrated on page 16.
- 2** Run the Customer Programming Software (CPS) on your computer.
- 3** On the handset, press the “1” and “9” keys together and then the On/Off key for about 3 seconds. Verify that no display appears on the LCD screen.
- 4** Click the Toolbar “Read Phone” icon.
- 5** Follow the instructions on your PC. 

PROGRAMMING d1700 WITH DATA CABLE FKN4897 *(continued)*



HARDWARE SETUP: DIMETRA MTP200/MTP300/MTM300

Use the programming kit with the following software item:

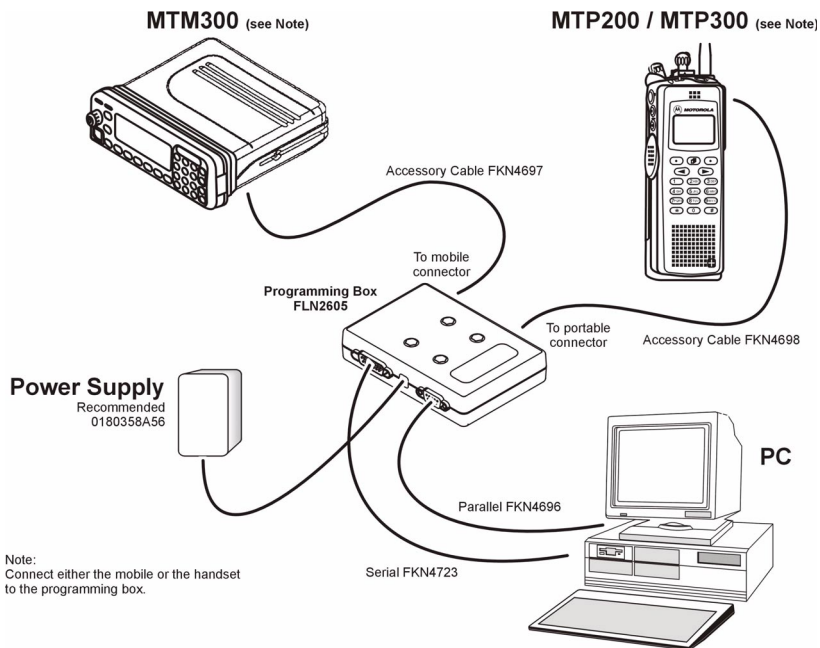
Description	Release 3.1
MTP200/MTP300/MTM300 CPS	FVN4862

Programming Box FLN2605 interfaces between the Dimetra unit and an IBM PC (or compatible computer) running the TETRA CPS. To connect the programming box, proceed as follows:

- 1 Connect the programming box as illustrated on page 18.
- 2 Follow the instructions on your PC. ➡

Note: Programming kit FLN2505 consists of all required cables per table on page 46.

HARDWARE SETUP: DIMETRA MTP200/MTP300/MTM300 (*continued*)



Section 3: Using the CPS


FEATURES OF THE CPS APPLICATION WINDOW

The screenshot displays the 'Tetra Carrier CPS - MotorolaOriginal.dbf' application window. The interface includes a title bar, a menu bar (File, Edit, View, Tools, Window, Help), and a toolbar with various icons. The main area is divided into two panes. The left pane, titled 'MotorolaOriginal.dbf', contains a 'Codeplug Tree' showing a hierarchical structure of codeplug blocks. The right pane, titled 'MotorolaOriginal.dbf', displays the 'CODEPLUG CONTENT VIEW' as a table with 19 rows and 3 columns: Field Name, Field Value, and Reset.

Annotations point to the following components:

- Title bar
- Menu bar
- Toolbar
- Codeplug file name
- Codeplug window
- CODEPLUG TREE VIEW: Shows codeplug blocks in a tree structure. *The items in the tree view may vary based on the phone model.*
- CODEPLUG CONTENT VIEW: Displays contents of block that is highlighted in the tree view.
- Status bar: For Help, press F1

	Field Name	Field Value	Reset
1	Call Priority	Priority Not Defined	
2	Transmit Demand Priority	Preemptive Demand Priorit	
3	Transmit Demand Private Priority	Preemptive Demand Priorit	
4	Welcome Screen		Reset
5	Idle_message	Dolphin	Reset
6	Passcode	0000	
7	Max Password Attempts	3	Reset
8	PIN Unblocking Key	00000000	
9	Private Style	Speaker Control	
10	Ring Style	British	
11	MBX Gateway ID	16777184	
12	PABX Gateway ID	16767000	
13	Priority Call Type	Telephone	
14	Priority Dispatch Number		Reset
15	Priority Dispatch ID	16777214	
16	Status Default Target ID	0	
17	Status Default Target Type	0	
18	Number Of Service Center	0	
19	Default Validity Period	No validity	



 **TIP:** The information in the on-line help is presented in the following categories:

- Introduction to the CPS
- Using the Help Function
- Help on Specific CPS Tasks
- Help on Codeplug Blocks
- Menu Topics
- CPS Keyboard Shortcuts
- Troubleshooting
- Glossary
- Contacting Motorola

To access this topic list, select **Help/CPS Help Topics** from the CPS.

ACCESSING THE ON-LINE HELP SYSTEM

The on-line help contains detailed context-sensitive help on using the CPS. Here's how to access the help system:

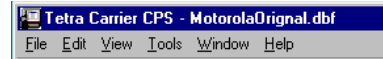
For...	Do this:
General help on using Windows	Click the Windows Start menu and select Help.
Help contents	From the CPS, select Help/CPS Help Topics .
Help on a part of the CPS window	Click the  button on the CPS toolbar and click the part of the window on which you need help.
Help on a CPS dialogue box	Click the Help button in the dialogue box. For help on parts of a dialogue box, click the  button on the dialogue box title bar and then click the part of the dialogue box on which you need help.
Context-specific help on a CPS field	Press the F1 key when the cursor is in that field, or right-click the field and select Help.
Help on a specific CPS menu item or field	Click the CPS Help Topics button in the Help window and click the Index or Find tab. Type the desired search keyword in the space provided. A list of topics that contain the search keyword will be displayed.

GETTING AROUND IN THE CPS

All CPS functions can be accessed using the menus, and some can be accessed using keyboard shortcuts as described on page 38. Data in the phone codeplug block can be accessed from the tree and content view of the codeplug window. These methods of navigation are explained below.

USING THE MENUS

There are six menus in the CPS, as shown below:



The Edit menu and some functions in other menus will be available *only when* a codeplug block is already open in the CPS or based on the context. For instance, the Copy function will be available only when you highlight item(s) that can be copied.

Refer to the menu map on pages 36 and 37 to familiarise yourself with the functions you can perform from each menu.

USING THE TREE AND CONTENT VIEWS

When a codeplug is opened, the CPS will display its contents in a codeplug window. The codeplug window is divided into two areas – the *tree view* and the *content view* – which make it easy to view the codeplug structure, and view or modify field values. The illustration below shows the relationship between the tree and content views.

The screenshot shows the 'Tetra Carrier CPS - MotorolaOriginal.dbf' window. On the left is the 'tree view' showing a hierarchy of folders: Codeplug, Subscriber Unit Parameters, User Personal Data, Ergonomic Parameters, General (selected), Timing Flags, Feature Flags, Volume Settings, Language Settings, Timers, Call List, and System Parameters. On the right is the 'content view' displaying a table of field values. The table has three columns: 'Field Name', 'Field Value', and 'Reset'. The 'Field Name' column lists 19 fields, and the 'Field Value' column shows their current values. The 'Reset' column contains a 'Reset' button for fields that are resettable. Arrows point from text labels to specific elements in the interface.

Highlight an item in the tree view to display its contents in the content view.

Click on plus and minus signs to expand and collapse (that is, open and close) folders.

This column displays the field name.

This column displays the field value.

This column contains a Reset button if a field is resettable. Clicking the button resets the field to its default value. *If there is no entry in this column, the field cannot be initialised.*

Click on an editable or initialisable field to modify the field value.

	Field Name	Field Value	Reset
1	Call Priority	Priority Not Defined	
2	Transmit Demand Priority	Preemptive Demand Priorit	
3	Transmit Demand Private Priority	Preemptive Demand Priorit	
4	Welcome Screen		Reset
5	Idle_message	Dolphin	Reset
6	Passcode	0000	
7	Max Password Attempts	3	Reset
8	PIN Unblocking Key	00000000	
9	Private Style	Speaker Control	
10	Ring Style	British	
11	MBX Gateway ID	16777184	
12	PABX Gateway ID	16767000	
13	Priority Call Type	Telephone	
14	Priority Dispatch Number		Reset
15	Priority Dispatch ID	16777214	
16	Status Default Target ID	0	
17	Status Default Target Type	0	
18	Number Of Service Center	0	
19	Default Validity Period	No validity	

For Help, press F1

Section 4: Tutorial



Caution

If you are new to the CPS, we suggest that you try these operations on a backup codeplug file until you become thoroughly familiar with the CPS.

This tutorial provides an overview of the tasks you will perform most frequently using the CPS. Refer to the “Help on Specific CPS Tasks” section in the on-line help for a more comprehensive task list.

Before you start, make sure the CPS is up and running as described on page 10. You will begin by opening a codeplug (or reading a codeplug from the phone) and making a backup copy that you can use in the tutorial.



OPENING A CODEPLUG FILE

If you wish to read the codeplug from a phone, proceed to the next task. To open a codeplug or archive file from disk:

- 1 Select **File/Open**.
- 2 In the File Open dialogue box, navigate to the drive and folder or directory where the codeplug file is located.
- 3 Double-click the desired file name or highlight it and click OK. The CPS will display the codeplug window.
- 4 Click on the (+) sign next to the Codeplug folder in the tree view. The codeplug window should look similar to the one on page 19.



Caution

Never disconnect the programming cable from the phone during the programming process or power off the PC while the codeplug file is in memory. This will destroy your phone data.

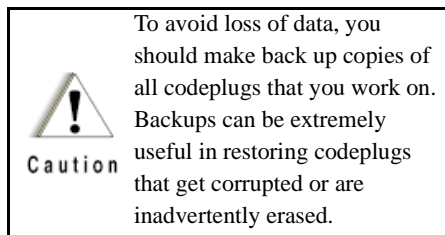
Note: If the progress bar does not appear or an error occurs, go through the checklist in the “Troubleshooting: Unable to Read Codeplug” topic in the on-line help.



READING A CODEPLUG FILE FROM THE PHONE

If you have already opened a codeplug file from disk, proceed to create a backup copy of the file as described in the next task. To read a codeplug:

- 1 Set up the programming hardware as described in “Section 2: Setting Up the Hardware” section on page 11.
- 2 Select **File/Read Phone**. A progress bar will appear and should begin progressing toward 100%. When the read process is complete, the CPS will display the codeplug window.
- 3 Click on the (+) sign next to the Codeplug folder in the tree view. The codeplug window should look similar to the one on page 19.
- 4 When you have completed viewing the phone codeplug information using the CPS, select **Tools/Reset Phone** before disconnecting the phone from the programming cable. This function returns the phone to its normal mode of operation.



CREATING A BACKUP CODEPLUG FILE


To make a backup of the codeplug file:


- 1 Make the codeplug file active by clicking on its title bar.
- 2 Select **File/Save As**. In the File Save As dialogue box, navigate to the drive and folder where you want to save the file.
- 3 Enter a new file name in the File name field and click OK to save the file.

Take a few moments now to review the CPS menus and the various features of the codeplug window. These are described in the “Using the CPS” section beginning on page 19. Then proceed to the next task.

CONFIGURING USER PERSONAL DATA

Fields relating to User Personal Data are grouped in the Ergonomic Parameters and Call List block of the codeplug. In this example, you will program the phone to automatically resend an emergency alarm in case no acknowledgement arrived. You will set the number of retries to 3.


 **TIP:** Use the Find feature in the Edit menu to easily locate a field in the current content view. Enter your search keyword and the CPS will locate the first field in the content view that contains the search keyword. If necessary, use the Find Next feature to search for the next occurrence.

 **TIP:** For help on a field, press **F1** while the cursor is in that field. Or right-click the field and choose Help from the popup menu.

- 1 In the tree view, click on the plus (+) sign next to the User Personal Data folder icon.
- 2 Click on the Ergonomic Parameters block, then on General. The contents of this sub-block will be displayed in the content view.
- 3 Locate the Emergency Alarm Retries field in the content view. To set the number of rings to 3, enter “3” in this field.

This is the same procedure that you will use to configure other user ergonomic features for the phone.

Note: You can use upper or lowercase characters, punctuation and extended foreign language characters such as “ç” in a call list alias. The phone will display uppercase, lowercase and punctuation. However, it may not display extended foreign language characters correctly.

 **TIPS:** Cut, Copy, Paste, Undo, Redo, Clear, and Find functions are available from the Edit menu. The Find function makes it possible to locate an entry in the current call list that contains the search keyword.

For a list of Call List editing shortcuts, refer to the “Keyboard Shortcuts” topic in the on-line help.

CONFIGURING CALL LISTS

In this example, you will add a couple of entries to the Phone List.

- 1 Click on the plus (+) sign next to the Call Lists folder in the tree view.
- 2 Highlight Phone List in the tree view. The phone list spreadsheet will be displayed in the content view.
- 3 Add the entries listed below to the phone list. Click on an empty row in the Phone list and add the first phone number alias by typing “LOCAL” in the Name column. Then type “5551212” in the Phone Number column. Repeat this procedure for the second entry.

LOCAL	5551212
OUT-OF-AREA	8005551212

- 4 Enable each entry by placing a corresponding check mark in the Status column.
- 5 To practice deleting an entry, highlight the “LOCAL” entry and select **Edit/Cut**. Then select **Edit/Undo** to retrieve the deleted entry.

This completes the task. Call list entries can be added, modified or deleted as described here.

Note: CPS copy and paste operations will function only under certain conditions. For instance, if you copy a set of cells and highlight another set of cells in which to paste them, the row and column sizes of the copied cells and the highlighted cells must match. Refer to the “Copy and Paste Operations” topic in the on-line help for details.


Note: If you paste the new entries over existing entries, the existing entries will be erased.

COPYING CALL LIST ENTRIES BETWEEN CODEPLUGS

A new feature in the Windows CPS makes it possible for you to copy call list entries from one codeplug to several other codeplugs. For the purpose of this example, you will copy the entries from the same codeplug file you used in the previous task. You will need a spare backup codeplug file to copy the entries to. (See page 25 for help on creating a backup codeplug file.)

- 1 Double-click on the Call List folder in the tree view to open the folder.
- 2 Click on Phone List in the tree view. The two entries from the previous example will be displayed in the content view.
- 3 Click and drag the cursor across the two entries in the content view to highlight them. (To copy the entire Call List, highlight the desired type of Call List in the tree view. Then click the Copy button on the toolbar.)
- 4 Select **Edit/Copy**. The highlighted entries will be copied to the clipboard.
- 5 Select **File/Open**. Locate the spare backup codeplug and double-click on the file name to open it.
- 6 When the file is opened, double-click on the Call List folder in the tree view. Click on Phone List.
- 7 Click (that is, highlight) the cell in the codeplug content view where you want to begin pasting the entries from the clipboard.
- 8 Select **Edit/Paste** to complete the operation.

Note: The CPS identifies codeplug files by their .dbf file name extension. If you do not use this extension when saving a codeplug file, the CPS will automatically add this extension to the file name when it saves the file.

 **TIP:** If you wish to save the file under a different name, select **File/Save As**.



SAVING A CODEPLUG FILE

When you have finished programming the codeplug, make sure you save a copy to a hard disk or diskette before writing it to the phone. To save a codeplug file that is already open in the CPS:

- 1 Click on the title bar of the codeplug file to make it active.
- 2 Select **File/Save**.
- 3 If the codeplug file is being saved for the first time, the File Save dialogue box will appear. Specify the file name and directory location where the file should be saved and click OK to complete the task.

Note: If the progress bar does not appear or an error occurs, go through the checklist in the “Unable to Copy Phone” topic in the on-line help.



COPYING THE CODEPLUG TO THE PHONE

This task is synonymous with “*writing partial codeplug*” to a phone. This function enables you to clone a group of phones with a working codeplug and does not change the Radio ISSI (Individual Short Subscriber Identity) and other parameters during the cloning operation.

- 1 Set up the programming hardware as described in “Section 2: Setting Up the Hardware” section on page 11.
- 2 Select **File/Copy Phone**. A progress bar will be displayed and should begin progressing toward 100%, indicating the progress of the write process.



Caution

Remember to save the original codeplug data before you make any changes, so that you can restore the phone to its original state if the programming goes wrong.



Caution

Never disconnect the programming cable from the phone during the programming process or power off the PC while the codeplug file is in memory. This will cause damage to the radio.


Note: If the progress bar does not appear or an error occurs, go through the checklist in the “Unable to Copy Phone” topic in the on-line help.



WRITING THE CODEPLUG TO THE PHONE

This task is synonymous with “*writing entire codeplug*” to the phone. A *codeplug read from one phone can only be written to that same phone using this process.*

- 1 Set up the programming hardware as described in “Section 2: Setting Up the Hardware” section on page 11.
- 2 If multiple codeplugs are open in the CPS, make the correct source codeplug file active by clicking on its title bar.
- 3 Select **File/Write Phone**. A progress bar will be displayed. After a few seconds, it should begin progressing toward 100%.

 **TIP:** Use Copy Wizard when you want to clone multiple phones with the same set of codeplug data. Once the data is written to one phone, simply connect the next phone and click the Write button. Repeat this process until you have cloned all the phones.

Note: Set up the programming hardware as described in “Section 2: Setting Up the Hardware” section on page 11. Select **Tools/Options** to check the setting in the Serial/Parallel Port field.



Never disconnect the programming cable from the phone during the programming process or power off the PC while the codeplug file is in memory. This will cause codeplug data to be corrupted.

Note: If the progress bar does not appear or an error occurs, go through the checklist in the “Unable to Copy Phone” topic in the on-line help.

WRITING CODEPLUG TO THE PHONE USING THE COPY WIZARD

In the previous task, you wrote codeplug data from a file to the phone. With the CPS Copy Wizard function, you can read codeplug data from a phone or a file, select the codeplug blocks to be copied, and write the codeplug to one or more phones – all in one step. In this task, you will use the Copy Wizard to write a codeplug to the phone.

- 1 Select **Tools/Copy Wizard**. The first Copy Wizard dialogue box will be displayed.
- 2 Click the appropriate radio button depending on whether you want to read codeplug data from a phone or from a file. In this case, select “Read from a file”.
- 3 In the space provided, specify the correct path to the data file. Click Next to display the second Copy Wizard dialogue box.
- 4 In the scroll list, select the codeplug blocks that you want to write to the phone. Click Next.
- 5 Click the Write button to transfer the selected data to the phone. A progress bar will be displayed and should begin progressing toward 100%.
- 6 When the process is complete, click Done to exit the Copy Wizard.

Notes:

Set up the programming hardware as described in “Section 2: Setting Up the Hardware” section on page 11.

If the progress bar does not appear or an error occurs, go through the checklist in the “Unable to Write Software” topic in the on-line help.

WRITING SOFTWARE TO THE PHONE (FLASHING)

This function enables you to update the phone software application version.

- 1 Select **Tools/Write Software**.
- 2 Click the Write button. After approximately 15-30 seconds, the progress bar should begin to move toward 100%.



Caution

Never disconnect the programming cable from the phone during the programming process or power off the PC while the codeplug file is in memory. This can cause call list data to become corrupted.

Notes: Set up the programming hardware as described in “Section 2: Setting Up the Hardware” section on page 11. From the **Tools** menu, choose **Options**. In the Options dialogue box, make sure that the default software path is set to the directory that contains the subscriber software files. If the progress bar does not appear or an error occurs, go through the checklist in the “Unable to Write Software” topic in the on-line help. If an error occurs during the update phase, go through the checklist in the “Unable to Read Phone” topic on the on-line help.

UPGRADING PHONE

This function enables you to update the phone software version and codeplug data.

- 1 Select **Tools/Upgrade Phone**. A Write Software and Codeplug confirmation message will be displayed on the screen.
- 2 In the Confirmation Message dialogue box, click the Write button. After approximately 15-30 seconds, the progress bar should begin to move toward 100%.



Caution

Never disconnect the programming cable from the phone during the programming process or power off the PC while the codeplug file is in memory. This will corrupt radio data.

FINAL THOUGHTS

This completes the TETRA Windows CPS tutorial and the “Using the CPS” section. We hope that, after reviewing this guide, you have gained a basic understanding of:

- The application and codeplug windows
- The relationship between the codeplug tree and content views
- CPS menus and menu functions
- CPS tasks and how to perform them

Be sure to review this material as necessary and refer to the on-line help for context-sensitive help as you use the CPS.

Appendix A: CPS Menu Map

1

File	
New...	Ctrl+N
Open...	Ctrl+O
Close	
Save	Ctrl+S
Save As...	
Read Phone	Ctrl+R
Write Phone	Ctrl+W
Copy Phone	
Import	▶
Export	▶
Print...	Ctrl+P
Print Preview	
Print Setup...	
1 MotorolaOriginal.dbf	
2 C:\WINDOWS\...\St_ps232.dbf	
Exit	

2

Edit	
Undo	Ctrl+Z
Redo	Ctrl+Y
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Clear	Delete
Find...	Ctrl+F

3

View	
Toolbars ▶	✓ Main
✓ Status Bar	✓ Phone

The Edit menu and the detailed File menu will be visible only when a codeplug file is open in the CPS.

CPS Menu Map (continued)

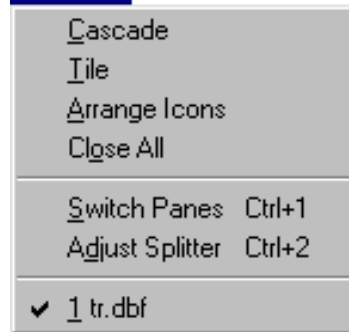
4

Tools



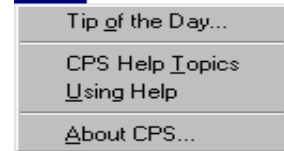
5

Window




6

Help



The Window menu and the detailed Tools menu will be visible only when a codeplug file is open in the CPS.

Appendix B: Keyboard Shortcuts

 **TIP:** Use these shortcuts in situations where you cannot use a mouse (for instance, programming a phone in the field).

Note: Refer to the “Keyboard Shortcuts” section in the on-line help for a list of spreadsheet and CPS navigation shortcuts.

Any CPS function or action that can be performed using the mouse can also be performed using the keyboard keys. This includes navigating through the CPS, accessing menu functions, and changing field values.

Here is a listing of shortcuts for frequently used CPS functions:

To perform this action...	Press:
Open a codeplug file	Ctrl+O
Save a codeplug file	Ctrl+S
Print a codeplug file	Ctrl+P
Read codeplug data from the phone	Ctrl+R
Write codeplug data to the phone	Ctrl+W
Cut the current entry	Ctrl-X
Copy the highlighted item (or its contents) to the clipboard	Ctrl+C
Paste the data from the clipboard	Ctrl+V

Keyboard Shortcuts (*continued*)

To perform this action...	Press:
Undo	Ctrl+Z
Redo	Ctrl+Y
Find an entry in the current content view	Ctrl+F
Reset the phone	Ctrl+E
Access the Copy Wizard	Ctrl+I
Write software	Ctrl+T
Upgrade phone	Ctrl+U
Access help on the current item or entry	F1

Appendix C: Troubleshooting

Note: Make sure that your computer meets the minimum requirements for installation that appear on page 7.

TROUBLESHOOTING THE SOFTWARE INSTALLATION

If there is a problem during the installation, the CPS will display an error message to indicate the type of problem that occurred. Some error messages are reproduced below along with information on how to troubleshoot them:

If you see this message...	Do this:
<i>Cannot create... directory.</i>	Make sure that the directory path you entered is valid. If not, specify a valid path.
<i>There is not enough space available xx bytes on disk XX.</i>	Make sure you have the amount of free disk space available and try the installation again.
<i>An error occurred during the move process.</i>	Quit all open applications and try the installation again.

**CAUTION**

Never disconnect the programming cable from the phone during the programming process or power off the PC while the codeplug file is in memory. This will destroy your phone data.



TIP: You can print any help topic (including troubleshooting topics) from the Help window by choosing **File/Print Topic**.

TROUBLESHOOTING THE HARDWARE SETUP

Hardware setup problems usually show up when reading or writing codeplug to the phone.

To solve the problem:

- 1 Make sure that the programming hardware you are using match the parts listed from page 44 on.
- 2 Check for loose hardware or power supply connections.
- 3 Examine the metal contacts on the phone and on the programming cable for dust or grime. If necessary, clean the contacts with alcohol and let dry.
- 4 Select **Tools/Options**. Make sure that the setting in the Serial or Parallel Port fields refer to the correct COM port.
- 5 Access the “Troubleshooting” section in the on-line help. It contains a comprehensive list of topics to help you solve computer-to-phone communication problems. Select the link that best describes the problem you are experiencing. The help topic will provide step-by-step instructions on the troubleshooting procedure.

Appendix D: Contacting Motorola

Motorola has made every effort to ensure that the TETRA CPS is of excellent quality. However, if you experience any problems with the product, we suggest that you refer to the following sources:

- This guide which is designed to help you install and get an overview of the CPS
- The on-line help which has a detailed Troubleshooting section
- The README.TXT file that was installed with the CPS

European Radio Support Centre (ERSC)

The ERSC Customer Information Desk is available through the following service numbers:

Austria: 06 60 75 41	Italy: 16 78 77 387
Belgium: 08 00 72 471	Luxembourg: 08 00 23 27
Denmark: 80 01 55 72	Netherlands: 60 22 45 13
Finland: 08 00 11 49 10	Norway: 80 01 11 15
France: 05 90 30 90	Portugal: 05 05 49 35 70
Germany: 01 30 18 75 24	Spain: 90 09 84 902
Greece: 00 80 04 91 29 020	Sweden: 02 07 94 307
UK: 08 00 96 90 95	Switzerland: 1 55 30 82
Ireland: 18 00 55 50 21	Iceland: 80 08 147

Or dial Customer Care Centre:

Tel.: 0049 6128 70 2618

Please use these numbers for repair enquiries only

Please have the following information ready when you call:

- 1** Nature and description of the problem.
- 2** When the problem occurred and what specific actions led to it.
- 3** Type of PC, manufacturer, version and type of operating system, memory size, disk space, CPS version, phone model type, and part numbers of programming kits used.

Note: The part numbers provided here do not contain version suffixes. You will automatically receive the latest version of the part when you place your order.

ORDERING PARTS

For complete information on ordering required parts and kits, contact your local customer service representative.

FLN2686 (UK plug)/FLN2687 (Euro Plug) for d700/MTH300

Name of Part	Part Number	Description
UK Power Supply or Euro Power Supply	EPN4040 or EPN4041	Supplies power to the RIB and to the computer via the adapter.
Serial Cable (comprises 3080369B71 and 3080369B72 cables)	FKN4723	Connects the RIB to the computer.
Adapter	FLN9348	
Programming Adapter Cable	NKN6497	Connects the phone to the programming cable from the computer (RKN4066).
Programming Cable	RKN4066	Connects the computer to the RIB, the phone, and the power supply via the adapter.
Radio Interface Box (RIB)	RLN4008	Connects the phone to the computer.
Operation and Service Manual	68P02956C82	

FLN2908 (UK Plug)/FLN2909 (Euro plug) for d700/MTH300/MTH300S

Name of Part	Part Number	Description
UK Power Supply or Euro Power Supply	EPN4040 or EPN4041	Supplies power to the handset and computer via the RFI filter.
RFI Filter	5804126K03	
Programming Cable	FKN4875	Connects the computer to the phone and power supply via the RFI filter.
Programming Kit User's Guide	68P02961C10	

FKN4897 Data/Programming Cable for d1700

Name of Part	Part Number	Description
Data/Programing Cable	FKIN4897	Connects the computer to the phone.

FLN2505 Programming Kit for Dimetra MTP200/MTP300/MTM300

Name of Part	Part Number	Description
Parallel Cable	FKN4696	Connects the Programming Box to the parallel port of the computer.
Accessory Cable (Mobile)	FKN4697	Connects the MTM300 to the programming box.
Accessory Cable (Portable)	FKN4698	Connects the MTP200/MTP300 to the programming box.
Serial Cable	FKN4723	Connects the programming box to the serial port of the computer.
Programming Box	FLN2605	
Operation and Service Manual	68P02955C62	

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